

taking ratios of predicted prevalence rates for obese versus non-obese individuals. Bootstrapped 95% confidence intervals were generated for prevalence ratios. **RESULTS:** Among obese adults the unadjusted prevalence of hypertension was (34.40%), followed by dyslipidemia (21.87%), diabetes (16.34%) and asthma (6.92%). Adjusted prevalence of chronic diseases was always higher among obese as compared to non-obese and the entire population. The prevalence ratio for diabetes was 3.06 (95% C.I.: 2.82 – 3.30) at the age of 20 and was 2.20 (95% C.I.: 2.09 – 2.31) at 70 years. At any age, obesity increases the likelihood of these conditions by at least 50% as compared to non-obese individuals. **CONCLUSIONS:** Prevalence ratios indicate that obesity has highest impact on prevalence of diabetes; followed by hypertension, osteoarthritis, dyslipidemia. Study findings suggest that obesity is not only a disease, but may also be a cause for other chronic disorders. There is a need to develop effective interventions to combat obesity and thus minimize its impact on other diseases in the United States.

PSY60

ECONOMIC CONSEQUENCES OF UNDER-UTILIZATION WITH TUMOR NECROSIS FACTOR INHIBITORS IN RHEUMATOID ARTHRITIS PATIENTS

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OBJECTIVES: Adherence to Food and Drug Administration recommended administration with adalimumab, etanercept, or infliximab may be variable. Suboptimal adherence patterns may contribute to health care cost increases. This study estimated incremental health care costs of tumor necrosis factor inhibitor (anti-TNF) under-utilization from a managed care perspective. **METHODS:** Medical/pharmacy claims from the LifeLink™ Health Plan database were used. Inclusion criteria included: index anti-TNF started January 1, 2004–December 31, 2007, age ≥18 years, 2 pre-index rheumatoid arthritis diagnosis codes (ICD-9 code 714.xx), ≥365 days of index drug, continuous enrollment 6/12 months pre-/post-index. Exclusion criteria included: switching biologics post-index and selected inflammatory conditions. Under-utilization events were defined as prescriptions/infusions with 10% less than recommended dosing for adalimumab (40 mg every other week/weekly with/without methotrexate), etanercept (50 mg weekly), or infliximab (3 mg/kg dose and maintenance infusion interval > 56 days). Incremental increases in health care costs for patients with under-utilization, compared to receiving recommended dosing, were estimated using cost regression models controlling for refill/infusion intervals. Models were estimated for a 12-month time horizon and until index drug discontinuation or loss of enrollment. **RESULTS:** A total of 4,586 RA patients receiving adalimumab (N=1,255; 27,540 prescriptions), etanercept (N=2,242; 48,517 prescriptions), or infliximab (N=1,089; 19,656 infusions) were included. Mean lengths of time (days) patients received adalimumab (856), etanercept (881), and infliximab (903) were comparable. Proportion of under-utilization events were 16%, 39%, and 2% for adalimumab, etanercept, and infliximab, respectively. Adalimumab or etanercept under-utilization was significantly associated with incremental increased health care costs (\$2,352 and \$879; p<0.01) for 12 months and through end of data (\$4,677 and \$3,806; p<0.01). Infliximab under-utilization was infrequent and not associated with increased health care costs. **CONCLUSIONS:** In this analysis, adalimumab or etanercept under-utilization was associated with increased total healthcare costs; however, infliximab under-utilization did not have a similar result. Additional research assessing clinical consequences of under-utilization is warranted.

PSY61

CHARACTERISTICS OF GOLIMUMAB UTILIZATION AND COSTS IN A SPECIALTY PHARMACY PROVIDER (SPP) SETTING

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OBJECTIVES: Golimumab is a 50 milligram (mg), once monthly, injected anti-tumor necrosis factor alpha therapy for treatment of rheumatoid arthritis, ankylosing spondylitis and psoriatic arthritis. This study calculated expected costs of annual golimumab therapy based upon observed dosing patterns within a SPP population during the first 16 months of golimumab availability. **METHODS:** Pharmacy and corresponding eNAVIGATOR™ patient care management data were collected by Diplomat Specialty Pharmacy, Flint, MI for adult patients with a golimumab prescription between 4/24/2009 and 8/24/2010. Data were analyzed statistically and are reported as n, %, mean±standard deviation (SD) and median. Costs were modeled in US dollars using the wholesale acquisition cost (WAC; effective 6/9/2010) of \$1,731.48 per 50 mg. **RESULTS:** The study included 89 patients. The majority were female (65%); age >45 years (69%); and reported prior biologic use (56%). A 50 mg golimumab dose was dispensed in 100% of patients and 100% of all doses. The mean (±SD) interval between golimumab doses was 32.0 ±14.1 days and the median was 28 days. The mean golimumab dosing interval in patients reporting biologic use prior to golimumab initiation was 32.9±15.9 days (mean±SD) and was similar to the mean dosing interval observed in patients reporting no biologic use prior to golimumab initiation (mean±SD: 31.1±12.1 days; p=0.15; NS). Based upon modeling of these early observations, the average golimumab patient will utilize approximately 11.4 doses of golimumab annually at a cost of \$19,739 (WAC). **CONCLUSIONS:** In this SPP population, all patients received 50 mg of golimumab. The mean and median times between distribution of golimumab doses were 32 days and 28 days, respectively. Based upon the dosing and distribution patterns observed, the estimated average annual per patient cost of golimumab would be \$19,739. Golimumab utilization may be similar for patients regardless of prior use of biologic therapies.

PSY62

PERCEIVED BENEFITS AND DISADVANTAGES OF INTRAVENOUS (IV) BIOLOGIC THERAPY AMONG PATIENTS WITH IMMUNOLOGY CONDITIONS

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OBJECTIVES: To identify perceived benefits and disadvantages of intravenous infusion (IV) biologic therapy among patients with immunology conditions currently treated with IV biologic medication. **METHODS:** Semi-structured telephone interviews were conducted with patients self-reporting a diagnosis of ankylosing spondylitis, Crohn's disease, psoriasis, psoriatic arthritis, rheumatoid arthritis, or ulcerative colitis and currently receiving IV biologic therapy. Study protocol and questionnaire were approved by an independent institutional review board. Patients rated satisfaction with current IV medication on a 7-point Likert scale, where 1= not at all satisfied and 7=very satisfied. Patients also discussed benefits and disadvantages of IV biologic therapy and reasons for IV preference. **RESULTS:** 405 interviews were conducted. Mean satisfaction was 6.1; 77% rated satisfaction as 6 or 7. The most frequently described benefits of IV therapy related to healthcare professional monitoring and oversight at time of infusion. More than half of patients also experience a social benefit of IV administration, including talking to other patients about experiences (56%) and tying-in other activities with infusion facility visits (55%). Most commonly described disadvantages of infusion were duration of infusion (41%) and scheduling issues (23%). Of current IV users, most (82%, n=332) prefer an IV medication to a subcutaneous injection. The most common reasons for IV preference were: not wanting to self-inject (43%), less frequent dosing (34%), and preference for healthcare professional administration (24%). Satisfaction with medication and perceived benefits varied somewhat by demographics, immunologic condition, and factors related to treatment. **CONCLUSIONS:** Current IV biologic users are highly satisfied with their medications. Patients perceive the additional opportunity for healthcare provider interaction at infusion facilities as a benefit of this mode of administration. These results support the need for continued patient access to IV therapeutic options and shared decision-making between patients and physicians when selecting biologic treatment.

PSY63

LONGITUDINAL ANALYSIS OF INFlixIMAB DOSING AND INFUSION INTERVALS ACROSS 30 INFUSIONS

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OBJECTIVES: Infliximab (IFX) is an infusible anti-tumor necrosis factor (anti-TNF) drug used in the treatment of rheumatoid arthritis (RA), with Food and Drug Administration (FDA) recommended administrations of 3 mg/kg at weeks 0, 2, 6, and every 8 weeks thereafter. Dose increases up to 10 mg/kg or decreases in infusion intervals to every 4 weeks may be appropriate based on individual response. Limited data are available presenting weight-based dosing, total quantity administered, and infusion intervals simultaneously over the course of 30 infusions. The objective of this study was to calculate weight-based dosing, total quantity infused, and infusion intervals for RA patients receiving IFX. **METHODS:** An event-level analysis was conducted using medical/pharmacy claims from the IMS LifeLink™ Health Plan database. Inclusion criteria included: IFX initiation January 1, 2004–December 31, 2007 (i.e., index date); patient age ≥18 years old; 2 RA diagnosis codes (ICD-9 714.xx); and 365 days of IFX persistence (i.e., number of days between first and last IFX treatment). Patients were excluded if they had: psoriatic arthritis (ICD-9 696.0), psoriasis (ICD-9 696.1), ulcerative colitis (ICD-9 556.xx), Crohn's disease (ICD-9 555.xx), or ankylosing spondylitis (ICD-9 720.0); evidence of any anti-TNF during the 6 months prior to index date; or evidence of taking abatacept or rituximab while on IFX. **RESULTS:** There were 19,656 IFX infusion events (N=1,089) identified. The median weight-based doses spanned 3.0–4.2 mg/kg. Overall median quantity infused at each infusion spanned 330–477 mg. Median infusion intervals spanned 50–56 days for infusions 4–20. The median infusion intervals spanned 44–50 days for infusions 21–30. **CONCLUSIONS:** The observed IFX administration schedule was consistent with FDA-approved prescribing of weight-based dosing and infusion intervals over the course of 30 infusions. These data contribute to the published literature by describing a consistent real-world administration schedule over a longer period of time compared to other published studies.

PSY64

GE CENTRICITY® ELECTRONIC MEDICAL RECORDS STUDY: COMORBIDITIES AND BIOLOGIC EXPERIENCE AMONG PATIENTS RECEIVING GOLIMUMAB

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OBJECTIVES: Golimumab is the first and only monthly subcutaneous fully human anti-TNF approved in the treatment of rheumatoid arthritis (RA), psoriatic arthritis (PsA), and ankylosing spondylitis (AS). This study evaluated co morbidities and pre-index biologic use among patients who received golimumab in the GE Centricity® electronic medical records (EMR) database. **METHODS:** Longitudinal EMR data were collected from outpatient practices in the United States. It contains clinical information on over 15 million patients through September 2010. Patients were selected based on the following criteria: ≥1ICD-9 diagnosis of RA, PsA, or AS; ≥18 years of age at the time of the first diagnosis; data 6-months prior and 3-months after a prescription record of the first biologic, and at least one prescription record for golimumab. Biologic experience was defined as use of a biologic within 6 months prior to the first golimumab record. **RESULTS:** A total of 153 [118 (RA); 20 (PsA); 15 (AS)] patients receiving golimumab were identified as meeting all the inclusion criteria. The mean age was 49 years and 75% were female; 101 (66%)